

What is claimed is:

1 1. In a communication system having a communication node selectably operable to
2 communicate by way of a communication network with a correspondent node, the
3 communication network having at least a first application-level entity, an improvement of
4 apparatus for facilitating bearer setup of a bearer between the communication node and the
5 correspondent node through operation of a selected bearer manager, the selected bearer manager
6 having a network identifier identifying a network location thereof, said apparatus comprising:

7 a first bearer setup request generator associated with the first application-level
8 entity, said first bearer setup request generator for generating a first bearer setup request, the first
9 bearer setup request for requesting the selected bearer manager to create the bearer between the
10 communication node and the correspondent node, the first bearer setup request, when generated
11 at the first application-level entity, free of the network identifier identifying the network location.

1 2. The apparatus of claim 1 wherein the communication network comprises an
2 application level and a transport level, wherein the first application-level entity forms a portion
3 of the application level, and wherein said first bearer setup request generator forms a portion of
4 the application level.

1 3. The apparatus of claim 2 wherein the first bearer setup request generated by said
2 first bearer setup request generator is sent to the transport level.

1 4. The apparatus of claim 3 wherein the separate-level transport level comprises an
2 AAA (Authentication Authorization Accounting) entity, and wherein the first bearer setup
3 request generated by said first bearer setup request generator is sent to the AAA entity.

1 5. The apparatus of claim 4 further comprising a second bearer setup request
2 generator associated with the AAA entity and coupled to receive an indication of the first bearer
3 setup request generated by said first bearer setup request generator, said second bearer request
4 generator for generating a transport-level bearer setup request, the transport-level bearer setup
5 request for delivery to the selected bearer manager to request the bearer manager, when delivered
6 thereat, to create the bearer between the communication node and the correspondent node.

1 6. The apparatus of claim 5 wherein the communication network comprises a first
2 network portion and at least a second network portion, the first network portion defining a home
3 network of the mobile node and the second network portion defining a visited network of the
4 communication node, and wherein the first application-level entity with which said first bearer
5 setup request generator is associated and the AAA entity with which said transport-level bearer
6 setup request generator is associated are positioned at the visited network portion.

1 7. The apparatus of claim 5 wherein the communication network comprises a first
2 network portion and at least a second network portion, the first network portion defining a home
3 network of the communication node and the second network portion defining a visited network
4 portion, wherein the at least the first application-level entity comprises a first application server
5 and a second application server, the second application server also forming a portion of the

6 application level, the second application server associated with the visited network portion and
7 the first application server associated with the home network portion, said first bearer setup
8 request generator for generating the first bearer setup request responsive to an application-level
9 signal provided thereto.

1 8. The apparatus of claim 7 wherein the AAA entity comprises a home-network
2 AAA entity and a visited-network AAA entity, and wherein the first bearer setup request is sent
3 by said first bearer setup request generator to the home-network AAA entity.

1 9. The apparatus of claim 8 wherein said second bearer setup request message
2 generator generates the transport-level bearer setup request by way of the visited-network AAA
3 entity to the selected bearer manager.

1 10. The apparatus of claim 9 wherein the transport-level bearer setup request message
2 generated by said second bearer setup request message comprises an AAA-protocol message.

1 11. The apparatus of claim 10 the selected bearer manager to which the transport-
2 level bearer request is delivered generates a response message, and wherein said second bearer
3 setup request generator further detects the response message.

1 12. The apparatus of claim 11 wherein the response message generated by the
2 selected bearer forms an AAA-protocol message.

1 13. The apparatus of claim 11 wherein said second bearer setup request generator
2 further returns an indication of the response message to said first bearer setup request generator.

1 14. The apparatus of claim 13 wherein said first bearer setup request message
2 generator further generates an application-level message for communication to the mobile node,
3 the application-level message indicative of the response message generated by the selected
4 bearer manager.

1 15. The apparatus of claim 1 wherein the communication system comprises a radio
2 communication system and the communication node comprises a mobile node, wherein the
3 communication network comprises a first network portion and at least a second network portion,
4 the first network portion defining a home network of the mobile node and the second network
5 portion defining a visited network of the mobile node, wherein the first application-level entity
6 comprises a home-network application server and wherein said first bearer setup request
7 generator is associated with the home-network server.

1 16. The apparatus of claim 1 wherein the communication system comprises a radio
2 communication system and the communication node comprises a mobile node, wherein the
3 communication network comprises a first network portion and at least a second network portion,
4 the first network portion defining a home network of the mobile node and the second network
5 portion defining a visited network of the mobile node, wherein the first application-level entity
6 comprises a visited-network application server, and wherein said first bearer setup request
7 generator is associated with the visited-network server.

1 17. In a method for communicating in a communication system having a
2 communication node selectably operable to communicate by way of a communication network
3 with a correspondent node, the communication network having at least a first application-level
4 entity, an improvement of a method for facilitating bearer setup of a bearer between the
5 communication node and the correspondent node through operation of a selected bearer
6 manager, the selected bearer manager having a network identifier identifying a network location
7 thereof, said method comprising:

8 selectably generating a first bearer setup request at a first application-level entity,
9 the first bearer setup request for requesting the selected bearer manager to create the bearer
10 between the communication node and the correspondent node, the first bearer setup request,
11 when generated at the first application-level entity, free of the network identifier identifying the
12 network location; and

13 providing the first bearer setup request, generated during said operation of
14 selectably generating, to a transport-level signaling layer entity.

1 18. The method of claim 17 wherein the first application-level entity comprises a first
2 application server, and wherein the first bearer setup request generated during said operation of
3 selectably generating is generated at the first application server.

1 19. The method of claim 18 further comprising the additional operation of routing,
2 from the transport-level signaling layer entity, a separate-level signaling-layer request signal to
3 the selected bearer manager.

- 1 20. The method of claim 19 further comprising the operation of returning a bearer-
- 2 manager response message to the first application server.

2013-03-26 10:00:00